

**GOVERNMENT OF INDIA  
ATOMIC ENERGY  
LOK SABHA**

STARRED QUESTION NO:40  
ANSWERED ON:23.11.2011  
LIFE OF NUCLEAR POWER STATIONS  
Agarwal Shri Jai Prakash

**Will the Minister of ATOMIC ENERGY be pleased to state:**

- (a) the names of nuclear power stations whose life span is going to expire;
- (b) the steps taken to prevent the threats of radioactivity caused by these power stations;
- (c) the names of nuclear power stations where incidents of radioactivity leakage have occurred during the last three years and the current year;
- (d) whether the Government has conducted or proposes to conduct any study to assess the impact of radioactivity on the families residing near these stations;
- (e) if so, the details thereof; and
- (f) the action taken or proposed to be taken by the Government in this regard?

**Answer**

THE MINISTER OF STATE FOR PERSONNEL, PUBLIC GRIEVANCES & PENSIONS AND PRIME MINISTER'S OFFICE (SHRI V. NARAYANASAMY)

(a) to (f) A statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO LOK SABHA STARRED QUESTION NO. 40 FOR ANSWER ON 23.11.2011 BY SHRI JAI PRAKASH AGARWAL REGARDING LIFE OF NUCLEAR POWER STATIONS.

(a) There is only one nuclear reactor, RAPS-1 at Rawatbhata in Rajasthan which is under extended shutdown condition for meeting regulatory requirements. All other 19 operating reactors have life spans upto their respective stipulated period. Atomic Energy Regulatory Board (AERB) periodically reviews the authorization for continued operation of nuclear power reactors and grants licence for operation for a stipulated period.

(b) There is no threat of spread of radioactivity from any of the operating nuclear power plants. These plants have sufficient safeguards by way of design features, operating practices and regulatory controls against any major radiological releases.

(c) During the last three years there have been no incidents of leakage and discharge of radioactivity has never exceeded beyond the limits stipulated by AERB.

(d) & (e) Epidemiological surveys to assess the effects of radiation have been conducted on the employees and their family members who reside near the nuclear power plants. The surveys have been conducted by reputed medical colleges in the areas where the plants are located and analysed by the Tata Memorial Centre, the premier cancer research institute in India. The surveys have indicated that the operation of nuclear power plants have no ill effects on health of people living near nuclear power plants.

It may be added here that the radiation dose in addition to the background dose an individual at the plant boundary receives is in the range of 0.42 – 39.60  $\mu\text{Sv}/\text{year}$  (2010) as against the AERB stipulated limit of 1000  $\mu\text{Sv}/\text{year}$ . This dose limit is same as the limit recommended by the International Commission of Radiological Protection (ICRP). For comparison, the average dose to a member of the public due to natural background radiation is 2400  $\mu\text{Sv}/\text{year}$ .

(f) Monitoring of radioactivity in the neighbourhood of nuclear power plants and radiological survey of nearby water bodies, ground water, food chain including milk, animal products, fruits, vegetables and fish are performed by Environmental Survey Laboratories to ensure that radioactivity level does not exceed limits stipulated by AERB.